

Received
3.19

SITE REPORT & ASSESSMENT

Location: Cartner's Service Center
U.S. 64 @ N.C. 901 & SR 1143 (Davie Co.)
Mocksville, North Carolina 27028

Outline: I. Purpose & Description of Audit

II. Site History

III. Site Detail

IV. Sampling Operations

V. Sample Results

VI. Assessment & Recommendations

Prepared by: Certifoam Services, Inc.
P.O. Box 5524
Winston-Salem, North Carolina 27113

(919) 744-7418

I. Purpose & Description of Audit

This study was undertaken to determine if any release has occurred in the area surrounding the seven underground storage tanks (USTs) located on site. Although the parcel where the tanks are is owned by Mr. Gene Cartner, the tanks are owned by Oil Products Company, Inc., of Salisbury, N.C.

Per the purchase agreement, Mr. Cartner has until March 31, 1989, to test for any contamination in the UST field. This study seeks to prove or disprove the presence of a release.

This study has also been completed in conjunction with sampling techniques and procedures as outlined by the N.C. Dept. of Environmental Management and provides the framework leading to either in-place closure or remediation.

II. Site History

Please note the enclosed copy of a USGS topographic map for location of site. The site is in a rural setting some 9.2 miles west of Mocksville on U.S. 64.

There are no nearby sources of hydrocarbon contamination excepting one service station which has been abandoned to the north west of the site, some 500' distant.

Prior to construction of the gasoline operation in the late 1950's, the location was in agricultural use. Presently, Cartner's Service Center operates as a service center offering gasoline, diesel fuel, mechanical services and commercial/agricultural tire sales.

In walking the property no other potential source of contamination was noted. All used motor oil is stored in 55 gallon drums inside after being drained, and no evidence of spillage was noted around these.

III. Site Detail

Another map detailing bounds of tanks as well as sampling points is enclosed. Tank capacities and contents are as follows:

- #1: 1000/diesel fuel
- #2: 2000/gasoline
- #3: " "

-#4: 2000/gasoline
 -#5: " "
 -#6: " "
 -#7: 550/kerosene (out of service, pump gone)

Topographically, the site slopes toward the north. The nearest drainage is to the south and north east into two separate drainage ditches that flow into Hunting Creek some 1.2 miles distant. The tanks are all covered with between 6-11" of concrete. No other USTs are on site.

IV. Sampling Operations

Sampling was done on 2/19-20/1990. All work was done with a Mobile Drill Minuteman rig equipped with 3½" flight augers. Actual sampling was accomplished with a hand auger. Both augers were cleaned between samples with a wire brush and water hose.

After site mapping, tank depths were taken. Depths and depth of samples are as follows:

<u>Tank Depth</u>	<u>Sample Depth</u>
#1- 7'3"	1A/B- 9'0"
#2- 8'4"	2A/B- 10'0"
#3- 8'4"	3A/B- 10'0"
#4- 8'4"	4A/B- 10'0"
#5- 8'4"	5A/B- 10'0"
#6- 8'5"	6A/B- 10'0"
#7- 6'1"	7A/B- 7'6"

All samples correspond to tank numbers and are composites of each A/B point. Field ID is same as lab ID. Samples were immediately placed into sealed bags on site and kept in an ice chest for transport to the office, where they were placed into a refrigerator until shipping to the lab for analysis.

V. Sample Results

Before shipment via UPS second-day air, each individual sample was scanned with a Gastech Model 1238 Flame Ionization Meter for potential contamination. The results were as follows:

1A: 10 ppm	1B: 25 ppm
2A: 95 ppm	2B: 500+ ppm
3A: 70 ppm	3B: 500+ ppm
4A: 45 ppm	4B: 50 ppm
5A: 50 ppm	5B: 75 ppm
6A: 40 ppm	6B: 20 ppm
7A: 25 ppm	7B: 50 ppm

For shipment frozen ice paks were enclosed to ensure sample quality.

Testing was done by National Analytical Laboratories of Tulsa, Oklahoma. EPA Method 8015 modified by California SW-846 and EPA 5030 was employed (see enclosed letter detailing operations from lab).

Lab results confirm that a substantial release has taken place in the area of samples 2 & 3.

In order total petroleum hydrocarbon levels were less than 0.05 ppm, 3360 ppm, 17900 ppm, below 0.05 ppm, 0.78 ppm, 0.4 ppm, and 0.2 ppm.

Chain of custody letter accompanies.

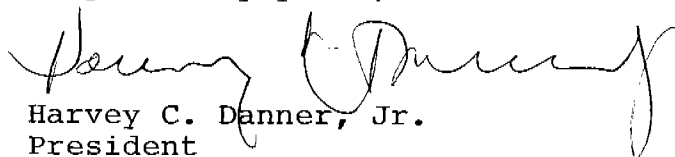
VI. Assessment & Recommendations

As the level of contamination exceeds the EPA standard of 100 ppm and the stricter NCDEM threshold of 40-60 ppm for the site area, the nearest office of the NCDEM (Winston-Salem) must be notified immediately of the release and remediation procedures must begin at their insistence.

Minimum compliance includes excavation of the contaminated soil and construction of a soil farm for purification. Ground water level also needs to be determined and the direction of flow analyzed. Tanks must be disposed of by an authorized disposal company.

Any questions are welcome in conjunction with this audit.

Respectfully yours,



Harvey C. Danner, Jr.
President

cc/HCD
Gene Cartner
Oil Products Co., Inc.

Site: Carther's Service Center
U.S. 64 @ NC. 901
Mocksville, N.C. 27028

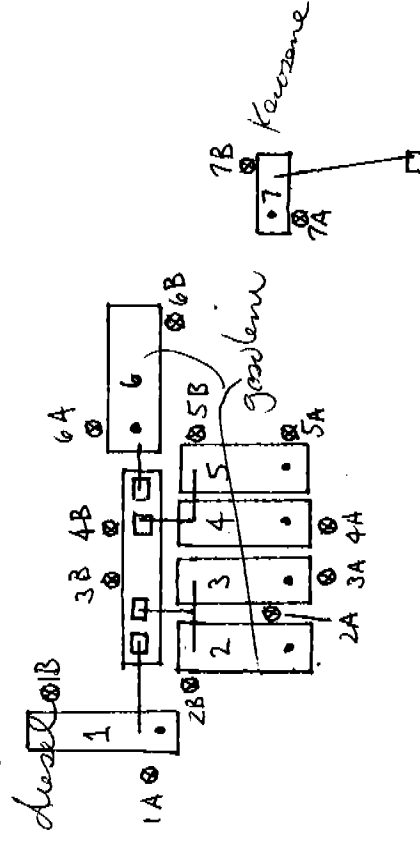
Scale: 1" = 20'

Key: #1-7, UST's

⊗, Sample Points.



U.S. 64



Office / Service Bldg.

NATIONAL ANALYTICAL LABORATORIES

A Division of



LAB SAMPLE NO.
(1,2,3,4,5,6,7)-CSC
COLLECTOR'S SAMPLE NO.
Same

CHAIN OF CUSTODY RECORD

COMPANY NAME Certifoam Services, Inc.		SAMPLING LOCATION OTHER	<input type="checkbox"/> Producer	<input type="checkbox"/> Hauler	<input checked="" type="checkbox"/> Disposal Site
ADDRESS - NUMBER, STREET P.O. Box 5524					
CITY Winston-Salem, N.C. 27113		COLLECTOR'S NAME Harvey Danner		PHONE NO. 919/744-7418	
STATE	ZIP CODE	DATE & TIME SAMPLED (2/19, 20/90) (8 AM - 6 PM)		DATE REC'D. IN LAB	

TYPE OF PROCESS PRODUCING MATERIAL

Soil

FIELD INFORMATION

Placed in sealed bag on site

REMARKS

*Taken at Carthage Service Center
Mocksville, N.C.*

CHAIN OF POSSESSION

	SIGNATURE	TITLE	INCLUSIVE DATES	
			FROM	TO
1.	<i>Harvey Danner</i>	President	2/19/90	2/21/90
2.	<i>Ch. H. Danner</i>	<i>Lab</i>	FEB 23 1990	
3.				
4.				
5.				
6.				
7.				
8.				

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U.S.
POLLUTION
CONTROL, INC.

January 23, 1990

Mr. Harvey Danner
Certified Foam Products
P.O. Box 5524
Winston-Salem, NC 27103

Dear Mr. Danner:

National Analytical Laboratories uses the following steps to analyze for gasoline and diesel in your samples.

- Prepare sample for analysis using a two component trap, Tenax and SP-2100 on Carbopack, in the purge and trap. (Reference Method SW846-5030.)
- Analyze the samples using a Restek RTX-502.2, 105 meter, 0.5mm ID column on a temperature programmed GC/FID. (Reference Methods: SW846-8015, modified; and California DHS Total Petroleum Hydrocarbons procedure.)
- Use authentic reference standards for pattern matching to gasoline or diesel. In the event that hydrocarbons are present but do not match a gasoline, diesel or other common pattern, a carbon number range will be reported.
- The data is calculated as mg/kg but reported as ppm at your request.

National Analytical Laboratories has been pleased to provide the analytical support for your projects. If you have any questions, please call either Carla Lance or myself at (918) 446-1162.

Sincerely,

Bonnie D. Oglesby
Bonnie D. Oglesby
Laboratory Manager

BDO:kdk

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U.S.
POLLUTION
CONTROL, INC.

HARVEY DANNER
CERTIFOAM SERVICES
P O BOX 5524

WINSTON-SALEM NC 27113

REPORT NUMBER: 6287A07

SAMPLE IDENTIFICATION: 6287-01
CUSTOMER IDENTIFICATION: 1-CSC
DATE SAMPLED: 2/20/90
TYPE OF MATERIAL: SOIL

DATE RECEIVED: 2/23/90
DATE COMPLETED: 3/07/90

<u>PARAMETER</u>	<u>REF. METHOD</u>	<u>DET. LIMIT</u>	<u>RESULT</u>
TOTAL PETROLEUM HYDROCARBONS	-	-	-
GASOLINE	MOD 8015	0.05 PPM	BDL PPM
DIESEL	MOD 8015	0.05 PPM	BDL PPM

BDL = BELOW DETECTION LIMIT

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REPORT NUMBER: 6287A07

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SAMPLE IDENTIFICATION: 6287-02
CUSTOMER IDENTIFICATION: Z-CSC
DATE SAMPLED: 2/20/90
TYPE OF MATERIAL: SOIL

DATE RECEIVED: 2/23/90
DATE COMPLETED: 3/07/90

<u>PARAMETER</u>	<u>REF. METHOD</u>	<u>DET. LIMIT</u>	<u>RESULT</u>
TOTAL PETROLEUM HYDROCARBONS	-	-	-
GASOLINE	MOD 8015	0.05 PPM	BDL PPM
DIESEL	MOD 8015	0.05 PPM	BDL PPM
C5-C16 HYDROCARBONS	MOD 8015	0.05 PPM	3360. PPM

BDL = BELOW DETECTION LIMIT

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SAMPLE IDENTIFICATION: 6287-03
CUSTOMER IDENTIFICATION: 3-CSC
DATE SAMPLED: 2/20/90
TYPE OF MATERIAL: SOIL

DATE RECEIVED: 2/23/90
DATE COMPLETED: 3/07/90

<u>PARAMETER</u>	<u>REF. METHOD</u>	<u>DET. LIMIT</u>	<u>RESULT</u>
TOTAL PETROLEUM HYDROCARBONS	-	-	-
GASOLINE	MOD 8015	0.05 PPM	BDL PPM
DIESEL	MOD 8015	0.05 PPM	BDL PPM
C5-C16 HYDROCARBONS	MOD 8015	0.05 PPM	17900 PPM

BDL = BELOW DETECTION LIMIT

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SAMPLE IDENTIFICATION: 6287-04
CUSTOMER IDENTIFICATION: 4-CSC
DATE SAMPLED: 2/20/90
TYPE OF MATERIAL: SOIL

DATE RECEIVED: 2/23/90
DATE COMPLETED: 3/07/90

<u>PARAMETER</u>	<u>REF. METHOD</u>	<u>DET. LIMIT</u>	<u>RESULT</u>
TOTAL PETROLEUM HYDROCARBONS	-	-	-
GASOLINE	MOD 8015	0.05 PPM	BDL PPM
DIESEL	MOD 8015	0.05 PPM	BDL PPM

BDL = BELOW DETECTION LIMIT

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SAMPLE IDENTIFICATION: 6287-05
CUSTOMER IDENTIFICATION: 5-CSC
DATE SAMPLED: 2/20/90
TYPE OF MATERIAL: SOIL

DATE RECEIVED: 2/23/90
DATE COMPLETED: 3/07/90

<u>PARAMETER</u>	<u>REF. METHOD</u>	<u>DET. LIMIT</u>	<u>RESULT</u>
TOTAL PETROLEUM HYDROCARBONS	-	-	-
GASOLINE	MOD 8015	0.05 PPM	BDL PPM
DIESEL	MOD 8015	0.05 PPM	BDL PPM
C5-C16 HYDROCARBONS	MOD 8015	0.05 PPM	0.78 PPM

BDL = BELOW DETECTION LIMIT

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SAMPLE IDENTIFICATION: 6287-06
CUSTOMER IDENTIFICATION: 6-CSC
DATE SAMPLED: 2/20/90
TYPE OF MATERIAL: SOIL

DATE RECEIVED: 2/23/90
DATE COMPLETED: 3/07/90

<u>PARAMETER</u>	<u>REF. METHOD</u>	<u>DET. LIMIT</u>	<u>RESULT</u>
TOTAL PETROLEUM HYDROCARBONS	-	-	-
GASOLINE	MOD 8015	0.05 PPM	BDL PPM
DIESEL	MOD 8015	0.05 PPM	BDL PPM
C5-C16 HYDROCARBONS	MOD 8015	0.05 PPM	0.40 PPM

BDL = BELOW DETECTION LIMIT

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WINSTON-SALEM NC 27113

REPORT NUMBER: 6287A07

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SAMPLE IDENTIFICATION: 6287-07
CUSTOMER IDENTIFICATION: 7-CSC
DATE SAMPLED: 2/20/90
TYPE OF MATERIAL: SOIL

DATE RECEIVED: 2/23/90
DATE COMPLETED: 3/07/90

<u>PARAMETER</u>	<u>REF. METHOD</u>	<u>DET. LIMIT</u>	<u>RESULT</u>
TOTAL PETROLEUM HYDROCARBONS	-	-	-
GASOLINE	MOD 8015	0.05 PPM	BDL PPM
DIESEL	MOD 8015	0.05 PPM	BDL PPM
C5-C16 HYDROCARBONS	MOD 8015	0.05 PPM	0.20 PPM

BDL = BELOW DETECTION LIMIT